CLAIMS

1) An oral care composition comprising:

at least one carbon dioxide source,

at least one acid source,

at least one co-processed abrasive and one or more pharmaceutically acceptable excipients.

2) The oral care composition of claim 1, wherein carbon dioxide source is bicarbonate salt of an alkali or alkaline earth metal, a carbonate of an alkali or alkaline earth metal, or a mixture thereof.

3) The oral care composition of claim 1, wherein acid source is a pharmaceutically acceptable organic acid, inorganic acid, salt or partial salt of an organic acid or inorganic acid or a mixture thereof.

4) The oral care composition of claim 3, wherein the organic acid is citric acid, adipic acid, ascorbic acid, malic acid, tartaric acid, succinic acid, pyruvic acid, oxaloacetic acid, maleic acid, alpha-ketoglutaric, fumaric acid, isocitric acid, alginic acid, amino acids, cis-aconitic acid, lactic acid, or a combination thereof.

5) The oral care composition of claim 3, wherein the inorganic acid is phosphoric acid.

6) The oral care composition of claim 3, wherein the salt or partial salt of organic or inorganic acid is an alkali and alkaline earth metal salt of maleic acid, citric acid, adipic acid, malic acid, ascorbic acid, succinic acid, fumaric acid, phosphoric acid or a combination thereof.

~~7) The oral care composition of claim 1, wherein the abrasive is dicalcium phosphate dihydrate, dicalcium phosphate monohydrate, anhydrous dicalcium phosphate, tricalcium phosphate, calcium pyrophosphate, sodium metaphosphate, aluminum hydroxide, zirconium silicate, calcium carbonate, calcium hydrogen phosphate, zeolite, hydroxyapatite, alumina, aluminosilicate, calcium silicate, calcium aluminate, magnesium carbonate, magnesium phosphate, sodium metaphosphate, bentonite, talc, sodium aluminum silicate, melamines, phenolics, ureas, melamine-ureas, melamine-formaldehydes, urea-formaldehydes, melamine-urea-formaldehydes, cross-linked epoxides, cross-linked polyesters, alumina-based ceramics, zirconia, titanium diboride, pumice, co-processed abrasive or a combination thereof.~~

8~~7~~) The oral care composition of claim 7~~1~~, wherein the co-processed abrasive is co-processed calcium silicate, co-processed magnesium silicate or a combination thereof.

9~~8~~) The oral care composition of claim 8~~7~~, wherein the co-processed calcium silicate is calcium silicate co-processed with at least one water soluble carbohydrate, cross-linked polyvinyl pyrrolidone, chitin or a combination thereof

10~~9~~) The oral care composition of claim 9~~8~~, wherein the co-processed calcium silicate is a co-processed excipient of calcium silicate and at least one water-soluble carbohydrate.

11~~0~~) The oral care composition of claim 10~~9~~, wherein the co-processed calcium silicate is a co-processed excipient of calcium silicate and mannitol.

12~~1~~) The oral care composition of claim 1, wherein the pharmaceutically acceptable excipient is a sweetening agent, flavouring agent, surfactant, viscosity modifier, binder, disintegrant, glidant, anti-adherent, lubricant, diluent, humectant, chelating or sequestering agent, pH modifier, buffering agent, opacifier, colorant or pigment, adhesive, liquid carrier or a mixture thereof.

123) The oral care composition of claim 1, wherein the composition further comprises an oral care agent.

134) The oral care composition of claim 123, wherein the oral care agent is an anti-bacterial, antimicrobial, anti-plaque agent, astringent agent, desensitizing agent, fluoride containing anticaries agent, hydrogen peroxide source, tartar control agent, anticalculus agent, fluoride ion source, stannous ion source, anesthetic agent, whitening agent, tooth strengthening agent, anti-malodor agent, anti-gingivitis agent, anti-periodontitis agent, anti-sensitivity agent, anti-erosion agent, anti-xerostomia agent, occlusion agent, antiseptic agent, anti-oxidant, proteolytic enzyme, antistain agent, healing agent, nutrient, probiotic, remineralization agent, anti-inflammatory agent, analgesic agent, antibiotic, vitamin, antiviral agent, antifungal agent or a combination thereof.

145) The oral care composition of claim 134, wherein the oral care agent is an anti-bacterial antimicrobial, anti-plaque agent, desensitizing agent, fluoride ion source, anesthetic agent, whitening agent, anti-malodor agent, anti-gingivitis agent, remineralization agent, or a combination thereof.

156) The oral care composition of claim 1, wherein the composition is in the form of fast dissolving powder, quick dissolving granules, fast dissolving tablets, bite dispersion tablets, capsules, lozenge, films, non-aqueous liquid mixtures, oral rinse, mouth wash, toothpaste, tooth powder, oral tablet, denture product, or chewing gum.